

# MicroMate®

Uninterruptible Power Supply Systems



## ZBL Series

Tower

High Frequency Online UPS



Data Center



Local area  
Networks



Industrial  
Processes



Servers

*1 ~ 10KVA ( 1 Ph in / 1 Ph out )*

*10 ~ 20KVA ( 3 Ph in / 1 Ph out )*

*(Industrial Grade Models also Available)*

## Product Snapshot:

Model: 1-10KVA (1Ph in/1Ph out)  
: 10-20KVA (3PH in/1PH out)

Normal Input: 220/230/240/VAC (1-10KVA)  
: 380/400/415VAC (10-20KVA)

Normal Output: 220/230/240/VAC (1-20KVA)

Normal Frequency: 50/60Hz

Output Power Factor: 0.9/1.0

## Stable, Reliable and Comprehensive Protection

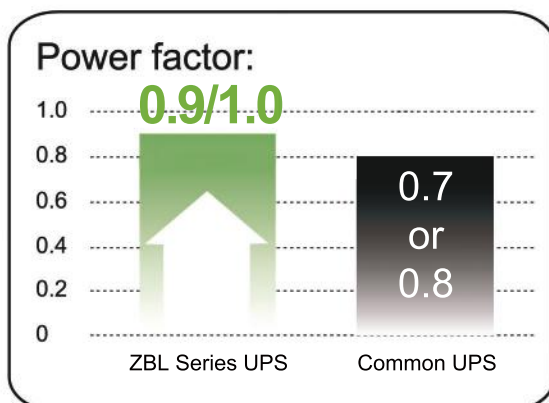
ZBL series 1-20KVA adopts double conversion through online architecture, which is designed to cater for various power related issues. The state-of-art solution can solve power loss and impurities such as over- and under-voltage, voltage sags or damped oscillation, high-voltage pulse, voltage fluctuation, voltage surge, harmonic and frequency distortion problems. It delivers a clean, safe and reliable power supply to your electrical or electronic loads.

### Key Features

- Cutting-edge digital technology i.e. DSP (Digital Signal Processor) can greatly improve the products performance and system reliability and deliver a compact integration with higher power density;
- Output power factor up to 0.9/1.0 - applicable to the trend of future load evolution and deliver higher payload capacity;
- Higher payload and overload capability, better load compatibility and suitable for various load types;
- Total power factor up to 100% can minimize the power loss of UPS and utilization cost for user;
- High Scalability: fully meet the customer's demands;
- Powerful Interference immunity capability in compliance with EMC requirements of IEC61000-4, deliver your device a clean electric environment.

### Tailored for Grid Environment

- Output power factor up to 0.9 - applicable to the trend of future load evolution, and deliver higher payload capacity;
- Total efficiency of more than 90% can minimize the power loss of UPS and utilization cost for user;
- Active power factor correction (PFC) technology allows the input power factor approaching to 1, dramatically reducing the immunity on utility grid;
- Wider range of input voltage tailored for all severe environments;
- Excellent input frequency range makes UPS suitable to different power supply devices, i.e. generator set.



### High Reliability

- Its cutting-edge digital control technology of DSP (Digital Signal Processor) can deliver higher quality, performance and reliability;
- Higher payload and overload capability, better load compatibility, and suitable for various load type;
- Powerful Interference immunity capability in compliance with EMC requirements of IEC61000-4, deliver your device a clean electric environment.

### Flexible Configuration on Demand

- High Scalability: fully meet the customer's demands;
- Online Intervention: safe and online intervention without any power supply interruption to load;
- Parallel Kit: realize the parallel extension and redundancy function, offer more flexibility and safety for user's power supply planning;
- Isolating Transformer: offer isolation protection for the user.

### Intelligent battery management

- With its advanced intelligent charge control mode, UPS can automatically select the optimal charge mode according to the battery type and conditions, thus further maximizing the lifespan of battery bank. In addition, the system can periodically conduct the charge & discharge management for the battery bank. User also can select the battery voltage (192V or 240V) on demands;
- The user can query and set the proper UPS control parameters for intelligent UPS management; automatically identify and adapt to 50/60Hz power supply system, fulfilling the requirements in various power supply systems;
- Perfect failure protection and alarm function: provide complete failure protection and clear alarm notification function in case of I/O over-voltage or under-voltage, battery over-charge or under-voltage, overload, and short circuit.

### Compact Design, Lower Noise

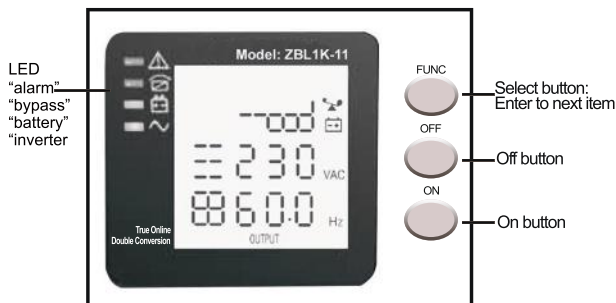
- With leading control technology and craftsmanship, this UPS can greatly increase the power density and reduce the footprint, therefore save more expensive space in your office environment. Additionally, its lower noise during operation can allow you a more comfort working environment.

## Rich Communication and Monitoring Features

- Provide RS232, USB interface and communication cable for local or remote power supply management;
- Provide intelligent slot available to Web Power (SNMP), CMC, or AS400 card (dry contact) for remote management and monitoring function.

## User-friendly interface

- LCD display accurate UPS working environment and working status to the user, through the LCD display panel can view output voltage and frequency, convenient for user to operate the UPS.



LCD + LED Panel instruction

## Intelligent Power monitoring and Management Software WinPower2003

- Support Microsoft Windows95/Me/NT/2000/XP/Linux operating system. Suit for TCP/IP local area network;
- Support TCP/IP network monitoring; Provide a hierarchical directory structure management network; Unusual event can be notified to user through broadcast, e-mail, messenger call or mobile messenger; Automatically detect the UPS model and the communication port; Provide password protection;
- Support timing boot up / shut off UPS function;
- Support timing UPS self-test function;
- Support graphically displayed UPS status function in real time;
- Support network to deactivate the function of multiple servers and workstations;
- Support Smart Event function, so that the user can defined according to their needs;
- Accept the abnormal power;
- Support to shut off most of the applications and the preservation of related document;
- Support for English and multi-language platform;
- Support the online help function; with data records (including mains, UPS, load, battery), and event function, to convenient the system administrator for the routine maintenance.



## ZBL Series Tower Online UPS 1KVA to 10KVA (1-Phase / 1-Phase ) 10KVA to 20KVA (3-Phase / 1-Phase )

### Technical Specifications

Model	Standard	ZBL1K-11	ZBL2K-11	ZBL3K-11	ZBL6K-11	ZBL10K-11	N.A.			
	S-Model	ZBL1KS-11	ZBL2KS-11	ZBL3KS-11	ZBL6KS-11	ZBL10KS-11	ZBL10KS-31	ZBL15KS-31	ZBL20KS-31	
	Industrial Grade	ZBL1K-11E	ZBL2K-11E	ZBL3K-11E	ZBL6K-11E	ZBL10K-11E	ZBL10K-31E	ZBL15K-31E	ZBL20K-31E	
Capacity		1KVA	2KVA	3KVA	6KVA	10KVA	15KVA	20KVA		
Nominal Voltage		220 / 230 / 240VAC 1-phase 2 wire + G					380 / 400 / 415VAC 3-phase 4 wire + G			
Nominal Frequency		50Hz / 60Hz								
<b>Input</b>										
Voltage Range		115 ~ 300VA 1-phase 2 wire + G			120 ~ 275VAC 1-phase 2 wire + G		209~475VAC 3-phase 4 wire + G			
Frequency Range		50Hz: (46 ~ 54Hz) ; 60Hz: (56Hz ~ 64Hz)								
Power Factor		> 0.98			0.99		> 0.95		0.99	
<b>Output</b>										
Voltage Precision		220 / 230 / 240 X (1±2%)VAC								
Frequency Precision		50 / 60Hz ±0.05Hz								
Power Factor		1.0								
Output Power		1000W	2000W	3000W	6000W	10KW	15KW	20KW		
Harmonic Distortion		Linear load <3% , Non-linear load <6%								
Overload Capacity		105% < load ≤ 125%, for 60s; 125% < load ≤ 150%, for 5s; load > 150% for 0.5s.			105% < load ≤ 125%, for 10minutes; 125% < load ≤ 150%, for 60s; load > 150% for 0.5s.					
Current Crest Ratio		3 : 1								
Transfer Time		0ms (AC mode ↔ DC mode) ; (AC mode ↔ Bypass < 4ms)								
<b>Battery</b>										
DC Voltage		24VDC / 36VDC	48VDC / 72VDC	72VDC / 96VDC	192VDC / 216VDC / 240VDC					
Recharge Time		5 hours to 90% (standard model with built-in battery)						N.A.		
Charging Current	Standard	1A			1A		N.A.			
	S-Model	6A / 12A						10A		
	Industrial Grade	1A			1A		4A	4A / 8A (Optional)		
<b>Panel Display</b>										
LCD		UPS status, input / output voltage and frequency, battery voltage, battery capacity, load capacity, adjust voltage								
<b>Communication</b>										
Communication Port		RS232, SNMP card (optional), USB port (Optional), Dry contact card (optional)								
<b>Working Environment</b>										
Temperature	Standard	0°C ~ 40°C								
	Industrial Grade	0°C ~ 50°C								
Relative Humidity		0 ~ 95% (Non-condensing)								
Storage Temperature		-25°C ~ 55°C								
Elevation		1500m								
Noise Level		< 45dB	< 50dB				< 55dB			
<b>Physics Characteristic</b>										
Weight (KG)	Standard UPS Module	8.8	21.2	28.7	59.0	62.0	N.A.			
	S-Model UPS Module	4.0	6.7	7.4	14.0	16.0	16.9	31.0		
	Industrial Grade	12.1	27.2	34.7	71.0	74.0	16.9	31.0		
Dimension W*D*H (mm)	Standard UPS Module	145 x 299 x 209	192 x 460 x 328	191 x 460 x 720			N.A.			
	S-Model UPS Module			191 x 405 x 330		212 x 420 x 500	248 x 565 x 500			
	Industrial Grade	145 x 399 x 209		191 x 460 x 720		212 x 420 x 500	248 x 565 x 500			

STANDARD: EMC: EN 62040-2: 2018, IEC 62040-2: 2016 EN 61000-3-2:2014 EN 61000-3-3:2013 (IEC 61000-4-2:2008, IEC 61000-4-3:2006+A1:2007+A2:2010, IEC61000-4-4:2012, IEC 61000-4-5:2014, IEC 61000-4-6:2013, IEC 61000-4-8:2009, IEC 61000-4-11:2004, IEC 61000-2-2:2002)

LVD: IEC 62040-1:2008 (First Edition) + Am 1: 2013

NOTE: Product specifications are subject to change without further notice.